

Fw: Lahaina Project Mod 4 Revision

Nancy Rumrill to: Kate Rao

From: Nancy Rumrill/R9/USEPA/US
To: Kate Rao/R9/USEPA/US@EPA,

Nancy

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From: Craig Glenn glenn@apps.soest.hawaii.edu

To: David Albright/R9/USEPA/US@EPA, Joanna L Seto <joanna.seto@doh.hawaii.gov>, Nancy

Rumrill/R9/USEPA/US@EPA,

Date: 12/24/2012 12:57 AM

Subject: Lahaina Project Mod 4 Revision

Dear David and Joanna,

As we discussed on Friday, and as revised below and in the attached, we ask the EPA and the HDOH to provide the additional funds still required to complete the final phase of the Lahaina Tracer Project. These funds are needed to complete new aspects of the study, to complete our tracer dye interpretations and groundwater modeling as based on existing, incoming and planned new data, and to produce the final report.

Approximately \$66,000 additional support was made available to UH in Modifications 2 and 3 to support extended field operations and dye monitoring, and we appreciate the opportunity to collect that data. However, because the tracer test interpretation, numerical modeling and final report required that the peak of the breakthrough curve be reached (late April, 2012) and a declining limb be well established (which began July, 2012), these portions of interpretative work of the project could not be completed during the period in which they were funded (5/17/11 to 9/30/11). Instead, the protracted rates of tracer dye output/recovery and the very slow elution of the tracer breakthrough curves created new additional work and delayed the tracer interpretations, thereby leaving the important tasks of the final tracer and groundwater modeling interpretation segments effectively unfunded since the allocated funds had expired. In summary, a tracer test that was initially expected to take no more than a few months has now been ongoing for more than 1.5 years, and will continue for several months more. These delays necessitated the collection and analysis of more than 900 additional samples in excess of that predicted or funded (assuming that field work would have ended on October 31, 2011 approximately two months before the original report due date), synthesizing and writing results into two differing project reports (with revisions) rather than the one stipulated, and adding numerous additional conference calls and data updates. The extended dye-release rates

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have also increased the probability of dye degradation, making additional analytical work necessary to investigate and incorporate into the tracer modeling results as well. To make up for the shortfalls and to complete the new work generated by the project and its new report, we estimate that 2 months support for Robert Whittier plus modest travel and supplies for a total of \$15,560 are required to satisfactorily complete the study. A detailed explanation of the work required is included in the attached statements of work and budget; this work will include collection and analyses of a new suite of samples from coastal monitoring wells (Task 8), evaluation of samples for Deaminoalkylated Sulpho-Rhodamine-B (Task 9), and finalizing the tracer test and groundwater modeling interpretations as based on all the existing and new incoming data involved (Task 10). A final project report (including final review and revision) will be completed by June 30, 2012.

We appreciate your understanding of the unpredicted complications that arose over the course of the study, and for the opportunity to complete this important project.

Sincerely,

Craig

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